|   | / Index of Claims |          |        |               |           |          |                     |          |               |          |                |                |           | <i>'</i>     | Application No. |         |             |          |                 |               |                 |               |              |            | Applicant(s)    |                |              |         |         |           |          |           |   |  |
|---|-------------------|----------|--------|---------------|-----------|----------|---------------------|----------|---------------|----------|----------------|----------------|-----------|--------------|-----------------|---------|-------------|----------|-----------------|---------------|-----------------|---------------|--------------|------------|-----------------|----------------|--------------|---------|---------|-----------|----------|-----------|---|--|
|   |                   |          |        |               |           |          |                     |          |               |          |                |                |           | 1            | 10/018,267      |         |             |          |                 |               |                 |               |              |            |                 | COCHRAN ET AL. |              |         |         |           |          |           |   |  |
|   |                   |          |        |               |           |          |                     |          |               |          |                |                |           |              | Examiner        |         |             |          |                 |               |                 |               |              |            | Art Unit        |                |              |         |         |           |          | _         |   |  |
|   |                   |          |        |               |           |          |                     |          |               |          |                |                |           | ١.           | 11 0. 50        |         |             |          |                 |               |                 |               |              |            |                 |                |              |         |         |           |          |           |   |  |
|   | <u>.</u>          | 110010   |        |               | -         |          |                     | 118 11   |               | 10111    | 88118          |                |           |              |                 | 1       | Hoa Q. Pham |          |                 |               |                 |               |              |            |                 | 2877           |              |         |         |           |          |           |   |  |
|   | £                 |          |        |               |           |          | $\neg$              |          | Г             |          |                |                |           |              |                 |         |             | 1 1      |                 |               | <del></del>     |               |              |            |                 |                |              | -       |         |           | 1        |           |   |  |
|   | √ Rejected – (Th  |          |        |               |           |          |                     |          |               | Thro     | hrough numeral |                |           |              | il)             | N       | Non-Elected |          |                 | ted           |                 | A             | Appea        |            |                 |                |              |         |         |           |          |           |   |  |
|   |                   |          |        |               |           |          | _                   |          | -             | _        |                |                | Cancelled |              |                 |         |             |          | N               |               |                 |               |              |            |                 |                |              |         |         |           |          |           |   |  |
|   |                   |          | =      | A             | llov      | Ne(      | a l                 |          |               | ÷        |                | Restricted     |           |              |                 |         |             | 1        | Int             | erfe          | rer             | nce           |              | o          |                 | Ob             | ec           | ted     |         |           |          |           |   |  |
|   |                   |          |        |               |           |          |                     |          | L             |          |                |                |           |              |                 |         |             | ]        | Ш               |               |                 |               |              |            |                 | •              |              |         |         |           | ]        |           |   |  |
| ſ | Cla               | im       |        | Date          |           |          |                     |          |               |          |                |                | Claim     |              |                 |         |             |          |                 |               | CI:             | laim          | _            | Date       |                 |                |              |         |         | _         | 1        |           |   |  |
| Ì |                   |          |        | Т             | Т         | Ť        | T                   | T        | Т             | $\neg$   | $\dashv$       | -              |           |              |                 |         |             |          | ĺΠ              | Т             | $\sqcap \dashv$ |               | 0.0          |            |                 | Т              |              |         |         |           |          |           |   |  |
|   | Final             | Original | 3/9/04 |               |           |          |                     |          | Ì             |          |                | Final          | ١.        | Onginal      | İ               |         |             |          |                 |               |                 | .             | Final        | Original   |                 |                | -            |         |         |           |          |           |   |  |
|   | ίĪ                | Orić     | 3/6    |               |           |          | -                   |          |               |          |                | , iĪ           | ;         | 5            |                 |         |             |          |                 |               |                 |               | ίĒ           | Orić       |                 | -              |              |         | ŀ       |           |          |           |   |  |
| } |                   | 1        | 1      | $\dashv$      | $\dashv$  | $\dashv$ | $\dashv$            | $\dashv$ | ┪             | $\dashv$ | ┥.             | · <del>[</del> |           | 51           | +               | ╁       | +           | $\vdash$ | Н               | $\dashv$      | +               | ┨             |              | 101        | $\vdash$        | +              | +            | +       | +       | +         | $\vdash$ | $\dashv$  | 1 |  |
| Ì |                   | 2        | Ì      | $\neg$        | _         | 7        | $\neg$              |          | ヿ             | ┪        | 7              | ·              |           | 2            |                 | 1_      | 1           |          |                 |               |                 | ] .           |              | 102        |                 |                |              | $\perp$ |         |           |          |           | j |  |
|   |                   | 3        | 1      |               |           |          | 4                   |          |               |          | _ .            |                |           | 3            | $\perp$         | $\perp$ |             |          |                 |               |                 | ]             |              | 103        |                 |                | $\bot$       | 1       | $\perp$ | 1_        |          |           |   |  |
| } |                   | 5        | 7      | $\dashv$      | $\dashv$  | +        | -                   | $\dashv$ | $\dashv$      | $\dashv$ | $\dashv$       | -              |           | 54<br>55     | +               | +       | +           | Н        | Н               | $\dashv$      | +-              | ┨             |              | 104<br>105 | $\vdash$        | -              | +            | +       | +       | ┼         | $\vdash$ | _         |   |  |
| ŀ |                   | 6        | 1      | +             | $\dashv$  | $\dashv$ | $\dashv$            | 7        | $\dashv$      | $\dashv$ | $\dashv$       |                |           | 6            | +               | ╁       | -           | $\vdash$ | $\vdash$        | $\dashv$      |                 | 1             |              | 106        | $\vdash$        | $\dashv$       | ╁            | +       | ╁       | 十         | $\vdash$ | $\dashv$  |   |  |
| [ |                   | 7        | 1      |               |           |          |                     |          |               |          |                |                | 5         | 57           |                 |         |             |          |                 |               |                 | ]             |              | 107        |                 |                |              |         |         |           |          |           |   |  |
|   |                   | 8        | 7      | $\dashv$      | $\dashv$  | -        |                     | -        | 4             | 4        | 4              |                |           | 8            | +               | -       | -           | $\vdash$ |                 |               |                 | ١             |              | 108        | -               |                | 4            | +       | -       | +         | $\vdash$ | $\dashv$  |   |  |
| - |                   | 9<br>10  | 1      | +             | ┰         | ᅱ        | -                   | -        | $\dashv$      | +        | $\dashv$       |                |           | 69<br>60     | ╁               | ╁       | ╁           | $\vdash$ | $\vdash$        | $\dashv$      |                 | 1             |              | 109<br>110 | $\vdash$        | $\dashv$       | ╁            | ┿       | +       | ╁         | $\vdash$ | $\dashv$  |   |  |
|   |                   | 11       | 1      | $\exists$     | $\exists$ | ┪        | 寸                   |          |               |          |                |                |           | 31           | $\top$          | $\top$  |             |          |                 | $\exists$     |                 | <u> </u>      |              | 111        |                 | $\exists$      |              | _       |         |           |          |           |   |  |
| [ |                   | 12       | 1      | $\dashv$      |           | $\Box$   | $\Box$              |          | $\Box$        |          | Д.             |                |           | 2            | 1               | I       |             |          | Ш               |               | Ц.              | ]             |              | 112        |                 | 4              |              |         | 4       | _         |          |           |   |  |
| - |                   | 13<br>14 | 7      | $\dashv$      | $\dashv$  | -        | $\dashv$            | -        | $\dashv$      | +        | -              | -              |           | 33<br>34     | +               | +       | +           | Н        | $\vdash$        | +             | +               | ┨             |              | 113<br>114 | $\vdash$        | $\dashv$       | +            | +       | +       | +         | $\vdash$ |           |   |  |
| • |                   | (15)     |        | $\dashv$      | $\dashv$  | 7        | -                   |          | $\dashv$      | 7        |                |                |           | 55           | +               | +       | +           | $\vdash$ | H               | $\top$        |                 | 1             | _            | 115        |                 | 十              | +            | +       | +       | -         | Н        |           |   |  |
| Ţ |                   | 16       | 1      |               |           | $\Box$   |                     | $\Box$   |               |          |                |                |           | 6            |                 | I       | 1           |          |                 | $\Box$        |                 | ]             |              | 116        |                 |                |              |         |         |           |          |           |   |  |
| } | _                 | 17<br>18 | 1      | $\dashv$      | $\dashv$  | $\dashv$ | $\dashv$            | -        | 4             | -        | -              | -              |           | 67<br>68     | - -             | ╬       | +           | -        |                 |               | +               | 4             |              | 117<br>118 | H               | $\dashv$       | +            | +       | +       | ╀         | -        |           |   |  |
| } |                   | 19       | 1      |               | $\dashv$  | $\dashv$ | $\dashv$            |          | $\dashv$      | -        | $\dashv$       | -              |           | 9            | +               | ╁       | +-          | $\vdash$ | $\vdash$        | +             | +               | ┨             | _            | 119        | $\vdash$        | 十              | +            | ╁       | +       | +         | $\vdash$ |           |   |  |
| į |                   | 20       | 1      | $\Box$        |           |          |                     |          |               |          |                |                | 7         | 0            |                 |         |             |          |                 |               |                 | 1             |              | 120        |                 |                |              |         |         |           |          |           | _ |  |
| - |                   | 21<br>22 | 1      |               |           | $\dashv$ |                     | -        | $\dashv$      | 4        | 4              | <u> </u>       |           | ′1<br>′2     | +               | -       | -           | $\perp$  | $\vdash \vdash$ | $\dashv$      | +               | -             |              | 121<br>122 | $\sqcup$        | $\dashv$       | +            | +       | +       | +         | Н        | Ц         | • |  |
| ŀ |                   | 23       | 1      | $\dashv$      | $\dashv$  | $\dashv$ | $\dashv$            |          | $\dashv$      | $\dashv$ | $\dashv$       |                |           | 3            | +               | +       | +           | $\vdash$ | $\vdash$        | $\dashv$      | -               | ┨             | -            | 123        | H               | +              | +            | +       | +       | +         | Н        | Н         |   |  |
| Į |                   | (24)     | 1      |               |           |          | コ                   |          |               |          |                |                | 7         | <b>'</b> 4   | 工               | 1.      | 1           |          |                 |               |                 | ]             |              | 124        |                 |                |              |         |         |           |          |           |   |  |
| 1 |                   | 25       |        | $\dashv$      | _         | 4        | _                   | _        | $\dashv$      | 4        | 4              | , <u> </u>     | 7         | <b>'</b> 5   | $\bot$          | +       | 4_          | ┺        | Щ               | _             | 4_              | 4             | ļ            | 125        | Ш               | 4              | $\perp$      | 1       | ┸       | ╄         |          | Ц         |   |  |
| ŀ |                   | 26<br>27 | Н      | -             | -+        | $\dashv$ | $\dashv$            | -        | $\dashv$      | $\dashv$ | $\dashv$       | -              |           | '6<br>'7     | +               | ╁       | +           | $\vdash$ | $\vdash$        | $\dashv$      | +               | 1             | <b></b> -    | 126<br>127 | $\vdash$        | $\dashv$       | +            | +       | +       | ╁╌        |          | $\vdash$  |   |  |
| - |                   | 28       |        | 寸             |           |          |                     |          |               |          | ₫.             |                | 7         | 78           | $\top$          | ╈       | $\top$      |          |                 |               |                 | <u> </u>      |              | 128        |                 |                |              | +       |         |           |          |           |   |  |
|   |                   | 29       |        |               |           |          | $\dashv$            |          |               | $\dashv$ |                |                |           | 9            | 1               | $\bot$  |             | _        |                 | _             | 1               | ١.            |              | 129        | $\sqcup$        | _              | 4            | $\perp$ | 4       | ļ         |          |           |   |  |
| } |                   | 30<br>31 | Н      | $\dashv$      | $\dashv$  | $\dashv$ | $\dashv$            |          |               | $\dashv$ |                | <u>.</u>       |           | 30<br>31     |                 |         | ╁           | -        |                 | -+            | - -             | <b>∤</b> , ;: |              | 130<br>131 | ₩               |                |              | ┿       | ╬       | ╫         |          | Н         |   |  |
| - |                   | 32       |        |               | +         | 1        | $\dashv$            |          | $\dashv$      | 7        | 一.             |                |           | 32           | +               | +       | +           |          | H               | $\dashv$      | $\dagger$       | - I           |              | 132        | H               | $\dashv$       | +            | +       | 十       | $\dagger$ | Н        | $\exists$ |   |  |
|   |                   | 33       |        |               | $\Box$    |          | $\Box$              |          | $\Box$        | $\Box$   | Π.             |                |           | 33           | 工               | I       |             |          |                 |               |                 | ]             |              | 133        |                 | 4              |              |         | $\perp$ | $\perp$   |          |           |   |  |
| - |                   | 34<br>35 | Ш      | -             | $\dashv$  | $\dashv$ |                     | -        | $\dashv$      | 4        |                | <u> </u>       |           | 34<br>35     | - -             | -       | ╀           | $\vdash$ | H               | 4             | +               | -             | <u> </u>     | 134<br>135 | H               |                | -            | -       | +       | +         | -        | Н         |   |  |
| - |                   | 36       | Н      | +             | $\dashv$  | $\dashv$ | $\dashv$            |          | $\dashv$      | $\dashv$ | $\dashv$       | -              |           | 36           | ╫               | +       | +           | $\vdash$ | $\vdash$        | $\dashv$      | +               | ┨             |              | 136        | $\vdash$        | $\dashv$       | +            | ÷       | +       | +         | $\vdash$ |           |   |  |
|   |                   | 37       |        | $\Box$        |           |          |                     |          |               |          |                |                | 1         | 37           |                 |         |             |          |                 |               |                 | 1             |              | 137        |                 |                |              |         |         |           |          |           |   |  |
|   |                   | 38       | Щ      | -1            | _         | 4        | _                   | _        | $\dashv$      | 4        | _              | $\perp$        |           | 38           | 4               | - -     | ╀           | ļ        |                 | 4             | -               | -             |              | 138        | $\sqcup$        | 4              | _            | -       | ╄       | +         | $\vdash$ | Н         |   |  |
| ŀ |                   | 39<br>40 | Н      | $\dashv$      | $\dashv$  | $\dashv$ | $\dashv$            | $\dashv$ | $\dashv$      | $\dashv$ | -              |                |           | 39<br>30     | +               |         | +           | $\vdash$ | Н               | +             | +               | ┨             | -            | 139<br>140 | $\vdash$        |                | +            | +       | +       | ╁         | Н        | $\dashv$  |   |  |
|   |                   | 41       |        | 7             | $\dashv$  | 1        | 1                   |          | 1             | 1        |                |                | 9         | 91           | +               | †       | $\top$      | 1        | $\Box$          | $\dashv$      |                 | 1             |              | 141        | $\Box$          | $\top$         | $\top$       |         | $\top$  |           |          |           |   |  |
|   |                   | 42       |        | コ             | $\Box$    | $\Box$   | $\rightrightarrows$ | $\Box$   | $\Box$        | $\Box$   |                |                |           | 2            | I               | I       |             |          |                 | $\bot$        | T               | ]             |              | 142        | П               |                | $\perp$      | Ţ       | T       |           |          |           |   |  |
|   |                   | 43<br>44 |        | $\dashv$      | -         | 4        | $\dashv$            | $\dashv$ | 4             | $\dashv$ | $\dashv$       | -              |           | 94           | +               | +       | +           | $\vdash$ | $\vdash \vdash$ | +             | +               | -             |              | 143<br>144 | ┼┤              |                |              | +       | +       | +         | $\vdash$ | Н         |   |  |
| - |                   | 45       | H      | $\dashv$      | +         | $\dashv$ | $\dashv$            | $\dashv$ | +             | $\dashv$ | $\dashv$       | $\vdash$       |           | 55           | +               | +       | +           | H        | H               | $\dashv$      | +               | 1             | -            | 145        | ╁┤              | $\dashv$       | +            | +       | +       | +         | H        | Н         |   |  |
|   |                   | 46       |        |               | $\Box$    |          | $\Box$              |          |               |          |                |                | (         | 96           | $\perp$         | Ţ       | T           |          | 口               | $\Box$        |                 | ]             |              | 146        | П               | $\Box$         | $\downarrow$ | $\perp$ |         | $\perp$   |          |           |   |  |
|   |                   | 47<br>48 | Н      | $\dashv$      | $\dashv$  |          | -                   | 4        | $\dashv$      | $\dashv$ |                | -              |           | 97<br>98     | +               | +       | +           | $\vdash$ | H               | $\dashv$      | +               | -             | _            | 147<br>148 | $\vdash \vdash$ | $\dashv$       | +            | +       | +       | +-        |          | $\vdash$  |   |  |
| ł |                   | 48       | Н      | $\dashv$      | $\dashv$  | $\dashv$ | $\dashv$            | $\dashv$ | -             | $\dashv$ | $\dashv$       | $\vdash$       |           | 9            | +-              | +       | +-          | $\vdash$ | $\vdash$        | +             | +               | ┨.            | <del> </del> | 148        | $\vdash$        | $\dashv$       | +            | +       | +       | +         | $\vdash$ | $\vdash$  |   |  |
| ŀ |                   |          | -      | $\rightarrow$ | -+        |          | $\dashv$            | $\dashv$ | $\rightarrow$ | $\dashv$ | —1.            |                | +-        | <del>~</del> | -               | +-      | +           | +        | <del>   </del>  | $\rightarrow$ | $\rightarrow$   | -             | <del></del>  | 450        | +               | -+             | -+-          | +       | +-      | +         | +        | Н         | í |  |